MILITARY SPECIFICATION SHEET

CABLE, RADIO FREQUENCY, FLEXIBLE, COAXIAL, 93 OHMS, M17/30-RG062

| THIS CABLE USES PVC MATERIAL AND IS NOT TO BE USED IN AEROSPACE APPLICATIONS. |

| NOTE: THE AIR FORCE HAS RESTRICTED THE USE OF PVC IN AEROSPACE AND GROUND SUPPORT APPLICATIONS. CABLES WITH PVC JACKETING SHALL BE USED FOR RETROFIT PURPOSES ONLY UNTIL AN ALTERNATE JACKET IS APPROVED. |

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the cable described herein shall consist of this specification and the latest issue of MIL-C-17.

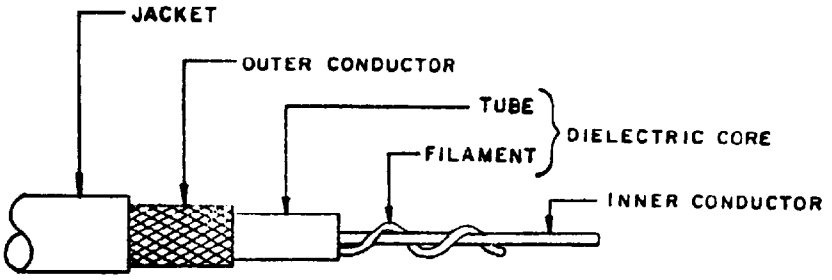

FIGURE 1. Configuration.

TABLE I. Description.

Component	Construction details
Inner conductor	Solid copper-covered steel wire. Diameter: .0253 inch ±.0010.
Dielectric core	Type A-3: Air-spaced polyethylene. A monofilament thread, .035 inch approximate diameter, with a lay of 1/2 inch approximate, under an extruded tube. Diameter: .146 inch ±.005.
Outer conductor	Single braid of AWG size 34 bare copper wire. Diameter: .191 inch, maximum. Coverage : 94.3%, nominal — Alternate: 96.5%, nominal Carriers : 16 — Alternate: 24 Ends : 7 — Alternate: 5 Picks/inch : 8.2 ±10% — Alternate: 12.3 ±10%
Jacket	Type IIa: PVC. Diameter: .242 inch ±.007.

ENGINEERING INFORMATION:

Continuous working voltage: 750 V rms, maximum

Operating frequency: 1 GHz, maximum.

Velocity of propagation: 83 percent, nominal.

Power rating: See figure 2.

Operating temperature range: -40°C to +80°C.

Inner conductor properties:

DC resistance (maximum at 20°C): 4.4 ohms per 100 feet.

Elongation: 1 percent, minimum.

Tensile strength: 110 $klb_f/inch^2$, minimum.

Engineering note: This cable useful in low capacitance, medium low temperature applications (see connector series "TNC" and "BNC" per MIL-C-39012).

REQUIREMENTS:

Dimensions, configuration, and description: See figure 1 and table I.

Environmental and mechanical:

Visual and mechanical examination:

(D) Out-of-roundness: Not applicable.

Eccentricity: 10 percent, maximum.

Adhesion of conductors: Not applicable.

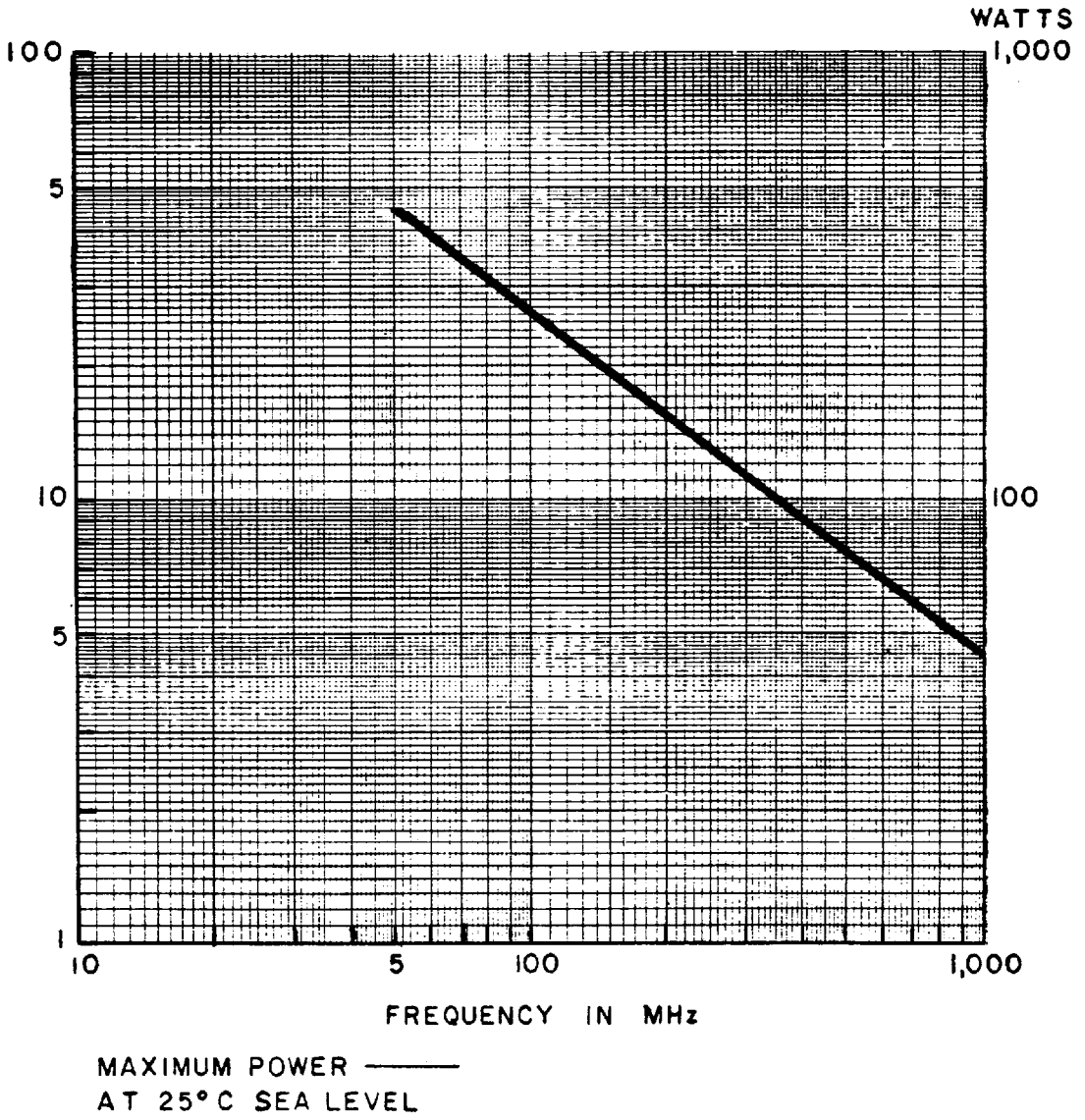

FIGURE 2. Power rating.

Aging stability: +98°C ±2°C.

(D) Stress crack resistance: Not applicable.

(D) Outer conductor integrity: Not applicable.

(D) Cold bend: -55°C ±2°C.

Dimensional stability: Not applicable.

(D) Contamination: Applicable.

(D) Bendability: Not applicable.

(D) Flammability: Not applicable.

Weight: 0.038 pound per foot, nominal.

Electrical:

Continuity: Applicable.

(D) Spark test: 5,000 V rms, +10%, -0%.

(D) Voltage withstanding: 3,000 V rms, +10%, -0%.

(D) Insulation resistance: Not applicable.

Corona extinction voltage: Not applicable.

Characteristic impedance: 93 ohms ±5.

Attenutation: 8 dB at 400 MHz and 13 dB at 1 GHz.

Structural return loss: Not applicable.

Capacitance: 14.5 pF per foot, maximum.

Capacitance stability: ±1.5 percent, maximum.

Capacitance unbalance: Not applicable.

Transmission unbalance: Not applicable.

Mechanically induced noise voltage: Not applicable.

Time delay: Not applicable.

Part number: M17/30-RG062 (NATO preferred type NWR-12).

Supersession data: See table II.

TABLE II. Cross-reference of part number.

Part number	Superseded part number or type designation
M17/30-RG062	RG-62A/U

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - MI
Navy - SH, TD
Air Force - 11, 17, 99
DLA - ES, IS

User activities:
Army - AR, AT, ME
Navy - AS, MC, OS
Air Force - 19

Agent:
DLA - ES

Preparing activity:
Army - CR

(Project 6145-0911-6)